# THE INDIANA

# FARMER & GARDENER.

**Vol. I.** **INDIANAPOLIS, AUGUST 23, 1845.** **No. 16.**

PUBLISHED BY

**S. V. B. NOEL & CO.**

TERMS.—The FARMER AND GARDENER is published *semi-monthly*, each number containing 16 royal octavo pages, at *One Dollar* per annum per copy; *Seventy-five Cents* per copy for Four and less than Ten copies; and *Fifty Cents* per copy for Ten or more copies to the same Post Office. All subscriptions IN ADVANCE.


## INDIANA FARMER & GARDENER.

### Indianapolis, Saturday, August 23, 1845.

#### Select List of Apples.

It is impossible to frame a list of apples which will suit every cultivator. Men's taste in fruits is widely different. The delicacy and mildness of flavor which some admire, is to others mere insipidity. The sharp acid, and coarse grain, and strong flavor which disgusts many palates, are with others the very marks of a first rate apple. The object of the cultivator in planting an orchard, whether for his own use, for a home market, for exportation, for cider making, or for stock-feeding, will very materially vary his selection.

The soil on which an orchard is to be planted should also determine the use of many varieties, which are admirable only when well suited in their locality.

Regard is to be had to climate, since some of the finest fruits in one latitude entirely betray our expectations in another. The hardiness and health of different varieties ought to be more an object of attention than hitherto. As in building, so in planting an orchard, a mistake lasts for a century, and a bad tree in a good orchard is like bad timber in a good mansion.

However select, then, a list may be, every cultivator must exercise his own judgment in adapting it to his own circumstances.

In framing the following list, we have relied upon the judgment of Aaron Alldredge, and are indebted to him for the most material part of the descriptions; and, except when other authorities are mentioned, the whole list is formed of fruits thoroughly proved in many orchards in Central and Southern Indiana.

#### Summer Apples.

1. CAROLINA JUNE. This is identical with the Red June of the principal nurseries; but many inferior varieties, scattered through the country, called Red June, are to be discriminated from it.

The tree is upright, with slender wood, which, when loaded with fruit, droops like a willow. It is a healthy tree, ripens its wood early in the fall, and is not subject to frost-blight. It comes early into bearing, is productive, and bears every year. The fruit is of medium size, though specimens grow large; the flavor is sprightly, subacid, the flesh tender. It has flourished well on sandloams, common clays, and on strong limestone clay. Ripens from the first to the twentieth of July. A valuable market fruit. Four trees, in Putnam county, sent *eighty*

*dollars* worth to market in one season. Not mentioned by eastern writers, nor found in eastern catalogues, but described at the west by Hampton and Plummer, and found in Ohio and Indiana nurseries.

2. Sweet June. Tree upright, wood moderately strong; ripens its wood early in fall; not subject to frost-blight; flourishes on all soils, even if quite wet; bears very young, often while in nursery rows; bears every year, and abundantly. The fruit is of medium size; color a pale yellow; form globular; flavor sweet and pleasant. Ripens at same time as the Carolina June.

3. Kirkbridge White. Not found in any catalogues but those of nurseries in Indiana. Tree upright, wood strong and stubbed; grows slow while young, but vigorously when fully established; ripens its wood early in autumn; not subject to frost-blight; bears moderately young, and is very productive. *Its fruit ripens in succession for six weeks, from first of July to middle of August*, and is peculiarly valuable on that account; color nearly white; it is largest at base and tapers regularly to the eye, and is ribbed; flavor mild, pleasant acid; flesh melting, and, if fully ripe, breaks to pieces in falling to the ground.

Its origin is somewhat doubtful. It was brought from New Jersey by Friend Quakers coming out to a yearly meeting in this State, and given to Jonathan Justice, Wayne county. It is widely scattered through Central Indiana, and deserves a place in every orchard.

4. Prince's Harvest. Manning pronounces this "the earliest apple worthy of cultivation." It may be in Massachusetts, but it is preceded by many at the West. Manning's description is good.

"The form is flat, of medium size; the skin, when perfectly ripe, is of a beautifully bright straw color; the flesh tender and sprightly; if gathered before they are fully ripe, it has too much acidity. The finest fruits are those which drop ripe from the tree; the branches make very acute angles, by which it is readily distinguished from most other trees in the orchard; it bears young. Ripe early in July."

Our nurserymen regard it as a shy bearer.

5. Summer Queen. Extensively cultivated in Indiana under the name of *Orange Apple*. The tree is spreading; a rapid grower; not subject to frost-blight; wood moderately strong; comes late into bearing; productive when the tree is fully grown, according to the books, but in this region with some exceptions, has proved a poor bearer. Fruit large, yellow, striped with red; flesh, breaking; flavor strong and not delicate.

6. Sweet Bough. Two varieties of this name are cultivated in this region—Coxe's and Mount's. Coxe's Sweet Bough, is that of the books and catalogues. The other variety was obtained of Judge Mount, Franklin county, Ind., for the true Sweet Bough, but proves different. Ripens at the same time; not quite so high in flavor. Coxe's trees are large limbed and spreading; bearing on the point of the limbs, and are shy bearers; Mount's variety is of upright growth; bears on spurs along the branches; is a good bearer, and ripens from middle of July to August.

"A variety under the name of Philadelphia Jennetting is known in Trumbull county, Ohio. It ripens two weeks later than the common kind, otherwise it is not essentially different."—*Dr. J. P. Kirtland.*

7. Summer Pearmain. There seem to be two varieties of this name cultivated in Ohio and Indiana.

(1.) That of Coxe, which is the one generally cultivated, and deservedly popular.

"The fruit-buds seem to be unusually hardy, and often resist the impression of late spring frosts, while others are killed. In 1834, when our fruits were universally cut off by that distructive agent, a tree of the summer pearmain and another of the Vandeveer, matured a dozen or two apples, while not another tree in an orchard containing over five hundred, bore a solitary fruit. It is worthy of more extensive cultivation."—*Dr. Kirtland.*

(2.) A variety is cultivated and sold by Aaron Aldredge of this place, which, is evidently allied to Coxe's, but all things considered, a more desirable variety. The fruit resembles Coxe's, but is larger; the flavor is the same, but not quite as high; Coxe's is oblong, this variety is Vandeveer pippin shape; color the same, and the period of ripening, viz: July and August. The trees are very distinct; Coxe's is upright, this is spreading; Coxe's of a slender growth, and stinted habit, and is hard to bring forward in the nursery; this has a vigorous growth, and

strong wood, and strikingly resembles the Vandeveer pippin tree. It bears early and abundantly, and in all soils.

This second variety was brought, by a man named Harlan, Fayette county, Indiana, from South Carolina, where it is extensively cultivated.

8. DANIEL. The tree is upright, nearly pear tree shape; wood strong and healthy; leaves, above all varieties, dark green and glossy; bears young and abundantly. Fruit medium size; it has a yellow ground covered with blotches of dull red; flavor rich, sweetish, and high. Ripens in succession from first to middle of August. A desirable variety.

9. HOSS, improperly pronounced *Horse*, and so written in Prince's catalogue. Originated in North Carolina; largely cultivated in both Carolinas and southern Virginia; named from the originator. It has been propagated by suckers, grafts, and *even by seeds;* in this latter case, the product very nearly resembles the parent. Three varieties, however, may be discriminated. Tree upright, wood strong and healthy; bears yearly and abundantly; flesh, melting: flavor rather too acid until thoroughly ripe, and then fine. Ripens in August and September. Desirable in the most select orchards.

The above list will furnish a good selection for marketing or home use, and is abundantly sufficient for all ordinary purposes, and trees may be had at all good nurseries in Indiana and Ohio.

The *time of ripening* I have set down for the latitude of Indianapolis. Upon the Ohio river, near Cincinnati, it will be ten days earlier; and in the south-western part of Indiana, around Evansville, three weeks earlier.

(*To be continued.*)

### Preserving Fresh Meat.

First, animals should be properly butchered, or it is of no use to attempt to keep the meat. They must fast at least one day in the winter, and double that time in the summer, before being killed; for when not tolerably clear of food the flesh will almost immediately spoil in hot weather. As soon as the meat comes into the house let it be carefully examined and wiped, and if it has been blown by flies, that part be cut off and thrown away. It should then be kept covered with a cloth, first scattering a mixture of salt with pepper, or ginger, or mustard, or any spices over it inimical to the fly. Now put it into the ice-house, the well, in the cellar, or a wire sieve, hung up in as cool, dry, and windy a place as can be found. Pieces of charcoal, or a complete envelope of it, is a very good method to preserve fresh meat. [Selected.

It is astonishing to observe how well meat will keep — when there is nothing to spoil it; and how it *will* spoil in hot weather in spite of all receipts. Meat is never fly-blown — when there are no flies; but, salt, pepper, mustard, cellars, wells, towels and cloths to the contrary, we could never keep it from fly-blows in a real insectiferous day — a day hot and dry, when nothing blows, except the fly.

An ice house will keep meat; but what if one has no ice house? Down in the well with it, say you? But down go the flies after it; for our wells are open, and not more than twenty feet deep. Put it in water? It gets slimy. We know of but one place to keep it from flies, and that is in the stove; and the best way to save it is, to eat it up as soon as possible. The hints for butchery, however, are worth attention. — *Ed. Indiana Far. and Gard.*

### Origin of some varieties of Fruit.

The history of our fine fruits has many curious points of interest to the zealous pomologist. It is made up of skill, felicitous blunders, discoveries, and profitable accidents.

The Flemish pears, with which so large a portion of the calendar of new pears is filled, were the product of scientific efforts. In like manner, many of the finest fruits originated by Knight, were by a scientific, although a different, process. On the other hand it would be difficult to find fruits superior to those in the making of which only Nature had a hand.

The *Duchesse D'Angouleme*, a pear without a rival, in its season, was found in 1815, growing wild in a hedge, near Angers, in the department of Maine et Loire, France.

The *Washington*, one of our finest native

pears, was likewise discovered in a thorn hedge, at Naaman's creek, Delaware, by Gen. Robertson. He was removing a fence on his farm, about forty-five years ago; he found the young tree nearly grown.

The *Lewis* is a native of Massachusetts. Mr. Downer, of Dorchester, a critical judge of fruits, was acquainted with the original tree ten years before he thought it worth a place in his garden. He visited it three times, and was each time disinclined to cultivate it; it was not until he had seen a tree taken from it, growing in cultivated ground, that he adopted it. It now ranks among the finest native pears.

*Dearborn's Seedling* was discovered by General Dearborn in a cluster of syringas and rose bushes, forming a part of a border to an avenue. Pears seem to have great fondness for hedges, borders, &c. The discoverer attempted to remove the tree, then, apparently, about five years old, to his nursery for a stock; but digging two feet deep, and finding no root but the tap root, he feared that deplanting might kill it. It was left to grow, and has proved to be one of the first class pears.

*Downer's late cherry*, was a stock in the nursery row, and several times budded with other kinds; the buds always failing, the tree was allowed to fruit, and proved one of the best, if not *the* best, of late cherries.

*Knight's Black Eagle* was raised from the seed of the Bigarreau fertilized by the May Duke. When it bore, the fruit was so inferior that the London Horticultural Society peremtorily rejected it. Mr. Knight determined to head the tree down and graft into it other sorts. But he had given the tree to a daughter, with whom it was a favorite, and she refused to have it sacrificed. Each year, subsequently, showed an improvement in the fruit; and now it stands in the first class of cherries. This is one among many instances, which shew that young seedlings do not exhibit the true qualities of the fruit for several years after they come to bearing.

The *Red-cheek Melocoton* peach was accidentally obtained by the late Wm. Prince, Flushing, Long Island. He had budded the Kennedy's Caroline upon a stock, and below the point of innoculation a branch of the original stock had shot up into bearing. Sending a servant to gather the budded fruit, he was surprised by his bringing, and, as he declared from this tree, a free-stone peach. On examining, he found the cause as stated above, and was so much pleased with the new kind that he cultivated it.

---

### Cultivation of Wheat.

There are two opinions which will prevent any attempt to improve the cultivation of wheat, or, indeed, of any thing else. The first is the opinion that, what are called *wheat-lands*, yield enough at any rate: the second is the opinion of those who own a soil not naturally good for wheat, that there is no use in trying to raise much to the acre. This second opinion is widely expressed by farmers in Central Indiana. We suppose that wheat will not *average* more than twelve bushels to the acre, as it is now cultivated in this region. At that rate, and with present prices, it is not worth cultivation for commercial purposes. The cost of seed, of labor in preparing the soil, putting in the crop, harvesting, threshing, and carrying it to market is greater than the value of the crop. At fifty cents a bushel, and twelve bushels to the acre, the farmer gets six dollars, which certainly does not cover the worth of his time and the interest on his land.

Is it possible, then, at an expense within the means of ordinary farmers, to bring a double or treble crop of wheat? If Nature has set limits to the produce of this grain to the acre, and if our farmers have come up to that limit, there is no use in their trying to do any better. But if their crop is four-fold behind what it ought to be, they will feel courage to reach out for a better mode of cultivation. Vegetables collect food from the atmosphere, and from the soil; and different plants select different articles of food from the soil, just as different birds, beasts, insects, &c., require different food. One class of plants draws potash largely from the soil, as turneps, potatoes, the stalk of corn, &c. Another class requires lime, in great measure, as tobacco, pea straw, &c. Leibig partially classifies plants according to the

principal food which they require; as silica plants, lime plants, potash plants, &c.

Every plant being composed of certain chemical elements, requires for its perfection a soil containing those elements. Thus chemistry has shewn, by exact analysis, that good meadow hay contains the following elements: Silica (sand:) lime (as a phosphate, a sulphate, and a corbonate i. e. lime combined with phosphoric, sulphuric, and carbonic acids.) Potash (as a chloride, and, a sulphate;) magnesia, iron, and soda. Whatever soil is rich in these will be productive of grass.

The grain of wheat, (in distinction from the straw) contains, and of course requires from the soil, sulphates of potash, soda, lime, magnesia, iron, &c.

Any vegetable, in its proper latitude, will flourish in a soil which will yield it an abundance of food; and decline in a soil which is barren of the proper nutritive ingredients.

A practical, scientific knowledge of these fundamental facts, will give an intelligent farmer, in grain-growing latitudes, almost unlimited power over his crops. A good cook knows what things are required for bread; he selects these materials, compounds them in definite proportions—adding, if any one is deficient; subtracting, if any one is in excess. Raising a crop is a species of slow cooking. Here is a compound of such materials (called wheat) to be made. Nature agrees to knead them together, and produce the grain, if the farmer will supply the materials. To do this he *must* understand what these materials are. Suppose a cook perceiving that the bread was wretched, did not know exactly what was the matter; and should add, salt, or flour, or yeast, or water at haphazard? Yet that is exactly, what multitudes of farmers do. They find that their fields yield a small crop of wheat. They do not know what the matter is. Is the soil deficient in lime, or sand, or clay? Is magnesia or potash lacking? Perhaps they do not even know that these things are requisite to this crop. "The land must be manured." Now, manure on an impracticable soil, is *medicine*. Of course if the farmer prescribes, he must tell *what* medicine, i. e. what manure. Is it vegetable matter or phosphates? alumina or silica? Suppose a doctor says: "you are sick and must take medicine," without knowing what the disease is, or what the appropriate remedy; and so should pull out a handful of whatever there was in his saddle bags and dose the wretch? That's the way farming goes on. "The ten acre lot wants manure." To the barn yard he goes, takes the dung heap, plows it under, and gets an enormous crop of—straw. Nitrogenous manure was not what the soil wanted. He has added materials which existed in abundance already; but those elements, from the want of which his crop suffered, have not been given it. The land is sicker than it was before. It languishes for want of one element, it suffers from a surfeit of another. We are prepared to sustain these observations by a reference to authentic facts.

Massachusetts, a few years ago, was not a wheat-growing State. Cautious farmers had given up the crop, because neither soil nor climate were supposed to favor it. How then have both soil and climate been persuaded to relent, and permit from twenty to forty bushels to grow to the acre? It was no accident, and no series of blind but lucky blunders, that effected the change. It was *thinking* that did it. *It was a change wrought by science.* Elliot, (in Connecticut,) Deane, (both clergymen,) Dexter, Lowell, Fessenden, and many others, all men of science, were pioneers. Agricultural surveys, geological surveys, and skillful chemical analyses of the soil and its products have been made for, now, a series of years. A Hitchcock, a Dana, a Jackson have applied science to agriculture. Pamphlets, books, and widely circulated newspapers have diffused this knowledge. Agricultural societies, state and county; farmers' meetings for discussion, such as are held every winter in Boston, have awakened the *mind* of farmers, and by learning to treat their soils skillfully, good wheat is raised in large quantities on soils naturally very averse to wheat.

The average crop of wheat in great Britain is *twenty-six* bushels to the acre, but forty and fifty are common to good farmers; sixty, seventy, and even eighty have been raised by great care.

In the whole United States it will not average much more than fifteen. A comparison of the two countries will shew a corresponding inferiority on our part in the application of *science* to agriculture. Scotland, formerly, hardly raised wheat. Since the formation of the Highland Agricultural Society in Scotland, wheat has *averaged* fifty-one bushels to the acre!—*Ellsworth's Report for* 1844, p. 16.

Lord Hardwicke stated, in a speech before the Royal Agricultural Society of England, that fine Suffolk wheat had produced *seventy-six* bushels per acre; and another and improved variety had yielded *eighty-two* bushels per acre! This was the result of "book farming" in a country where anti-book farmers raise *twenty-six* bushels to the acre.

Those very operations which farmers call *practical*, and upon which they rely in decrying "book farming" were first made known by science, and through the writings of scientific men.

These views have an immediate and practical bearing on the cultivation of wheat in this State, and particularly in central and southern Indiana.

It is the common remark of farmers: "wheat will not yield here as it does north." "I cannot get as much wheat as I used to in Pennsylvania," But all that such experience shews, is, that the soil requires some different treatment. We believe that in ten years as large a crop of wheat will be raised to the acre in central Indiana, as in any part of the Union.

Hitherto the want of enough cleared land has led farmers to put in wheat among the corn and *half* put it in at that. Others have plowed their fallows, or their grass lands, so early in the season, that rains and settling have made it hard again by seed time. Then, without stirring it, the grain has been thrown (away) upon it, and half harrowed in and left to its fate. Equally bad has been the system of late single plowing. Others have given their grain no soil to bed their roots in; a scratched surface receives the grain; its roots, like the steward, cannot dig, and so get no hold; and are either winter killed, or subsist upon the scanty food of the three or four inches of top soil. With some single exceptions, wheat cannot be said to have been *cultivated* yet. The two great operations in rendering soil productive of wheat, are, either the *developement of the materials already in the soil; or, the addition to the soil of properties which are wanting.*

Much land yielding only twelve or fifteen bushels, by a better preparation would, just as easily, yield thirty. Let us suppose that a common plowing of four or five inches, precedes sowing. Out of this superficial soil the wheat is to draw its food. Constant cropping, has, perhaps, already diminished its abundance. Then wheat is rank in stem, short in the head, and light in the kernel. But below there is a bed of materials untouched. The subsoil, if brought up, exposed to the ameliorating influence of the elements, will furnish in great abundance the elements required. The simple operation of deep and thorough plowing will, often, be enough to increase the crop one-half. Deep plowing gives a place for the roots, which will not be apt to heave out in winter; it saves the wheat from drought, it gives the nourishment of twice the quantity of soil to the crop.

Five acres may become ten by enlarging the soil *downward*. These remarks are introductory; and, while we intend to resume them, in our next, we say to such as may be getting ready for the wheat-sowing, *plow deeply and thoroughly;* unlike corn, wheat can only be plowed once, and that at the beginning. It should be thoroughly done, then, once for all.

### Apples Baked in the Sun.

A number of apples which had been baked in the sun were brought to our office on Thursday. A gentleman from East Hartford informed us yesterday, that he could pick up a bushel under his trees, which were baked in the same way. We think no further evidence is necessary to settle the character of the weather.—*Hartford Courant.*

Ah? And did not the owner catch a barrel of delicious drippings from the roasting apples on the tree? And did not the trees about two o'clock take fire, and, the orchard burn down? And was not the soil clay, and, being left unshaded, did it not burn to a pure

brick, to the depth of a foot? Will the Courant be kind enough to give us any additional items which come handy?

### Salt for Plum Trees.

A correspondent of the Maine Cultivator states that he came in possession of an estate on which were many neglected plum trees. He pruned them and they blossomed well, but produced no fruit. He then applied about two quarts of salt to a tree, placing it a foot or two from the tree, early in march, when the snow is on, as had been recommended, and he had an abundant crop of delicious fruit. This mode was recommended by Dr. S. A. Shurtleff, of Brookline, in a communication to the Boston Cultivator, two or three years since.

Dr. S. practices this plan with excellent success. Some fruit-growers have supposed that the effect of salt was to prevent the curculio from coming out of the earth, where it remains during the winter, and that the salt should be spread around the tree as far as the branches extend; but the experiment of Dr. S. proves that it is sufficient to place the salt in a ring around the tree, about two feet from the trunk, and his theory is that a portion of the salt is taken up by the roots, and enters into all parts of the tree, foliage, fruit and all, and gives it a healthful state, and gives to every part a distaste to insects.

*Boston Cult.*

The testimony to the efficacy of salt for plum trees, is, we think, so credible and abundant that no one should doubt it. But has salt any effect except upon the larvæ, or the full formed insects which have *bred in the earth where the salt has been applied?* Our plum trees are regularly depastured by these vegetable bandits, but they are all immigrants. They come to us from neighboring gardens. In this case a *pavement* under the tree, salt, and all such remedies designed to destroy either the curculio, or the larvæ in the soil, are useless.

The idea that salt enters into the composition of the tree, is curious, but is it true? What experiments have ever determined any such process to exist? Even if salt in substance, were diffused through the vegetable system, what evidence is there that the curculio would cease? He does not *taste* and then deposite his eggs. The immature plum is not his food, but only a hatching nest for his eggs. Any quantity of salt which would destroy the deposit, or be offensive to the depositor, would be ruin to the flavor of the fruit, or more probably, destroy the tree itself. Leibig gives an experiment which goes against the retention of salt in the tree.

"Let us consider the composition of the ashes of two fir trees as analysed by an acute and most accurate chemist. One of these grew in Norway, on a soil the constituents of which never changed, but to which soluble salts, and particularly common salt, were conveyed in great quantity by rain water. *How did it happen that its ashes contained no appreciable trace of salt,* although we are certain that its roots must have absorbed it after every shower!

"We can explain the absence of salt in this case by means of the direct and positive observations referred to, which have shown that plants have the power of returning to the soil all substances unnecessary to their existence; and the conclusion to which all the foregoing facts lead us, when their real value and bearing are comprehended, is that the alkaline basis existing in the ashes of plants *must be necessary to their growth, since, if this were not the case, they would not be retained.*"

When trees are so situated that foreign curculio do not infest them, it is quite probable that the home-made stock may be salted down with good effect. But otherwise the theory is too salty for our faith.

### A chapter on Feathers and Feather Beds.

He is poor indeed, in this land of abundance, this paradise of geese, ducks, and turkeys, who cannot feather his own bed. At the west, at any rate, whatever other thing is wanting, none need lack a feather bed; no girl is of a marriageble age or condition who has not earned a feather bed. The careful mother, intent on her daughter's dower, weaves her sundry woollen blankets, (ye gods of the loom! how thick, and warm, and cosey of a winter's night!) and makes her a huge, well-stuffed feather bed.

The Dutch, when fresh from "fader-land," sleep not *on* feather beds merely, but *under* them, employing them instead of bed-clothes.

It is very well, then, to attend to the science of feathers, or as the old sermonizers used to say, their "origin, nature, and uses, with some practical reflections."

I. The best feathers for domestic purposes are *geese-feathers*, being the most elastic and durable. There is about as much difference in their quality, as in the wool of different

breeds of sheep. The quality depends on their strength, elasticity, and cleanness; and these again, depend upon the condition of the bird, its health, food, and the time of plucking its feathers. *Down* is the term applied to under feathers—most abundant in water-fowl, and in those especially which live in cold latitudes, being designed to protect them from wet and cold. The eider-down, from the eider-duck, is of the most repute. It is brought from extreme northern latitudes, and is used for coverings to beds, rather than for beds themselves, as, by being slept upon it loses its elasticity.

*Poultry feathers*, as those of turkeys, ducks, and chickens, if assorted and the coarse ones rejected, afford very good beds; but they are not so elastic as geese-feathers.

II. Every body knows that live geese-feathers are *the* best. Every one does not think of the reason; which, as it is the key to the art of having good feathers, we shall propound.

So long as a bird is alive the feathers are as much an object of nutrition, as the flesh, the bones, or any other part. When the bird has been for any time dead, its parts relax, and the feathers are also affected, although from their chemical elements, the decomposition is not as rapid as it is in the flesh. But it *begins*. They lose their glossy color, their spring or elasticity, and like the rest of the body, they are dead.

Those feathers are best which are plucked in the very height of health and growth. It is well known that sickness changes the hair and skin of animals. A dull colored hair, dry and rough, is a concomitant of sickness in the horse, ox, &c. On the other hand, a bright, glossy, silky hue is a sign of health. Every one has noticed the same thing in fowls—the drabbled, rumpled, lack-lustre plumage of sick ones. The higher the condition, and the more vigorous the health of a flock of geese the better the *fleece;* while a meagre, draggling, half animated flock, never will yield *live*-geese feathers.

The same results arise from the *age* of feathers. They ripen, and are shed as the hair of animals. At the time of moulting the feathers are dry and lifeless — because they are spent, and are to be cast off as dead. When fowls are killed, the feathers will be alive and good, if immediately plucked off before the body grows cold. Sometimes geese are plucked five times a year, but only when they are owned by a greater goose than themselves. Such avarice defeats itself. No geese can be healthy under such cruel extortion; and, without health, feathers cannot be good; twice a year, in spring, and mid-summer, is often enough.

III. After feathers are picked they require careful attention.

Every feather is largely imbued with oil, by which it is defended from wet; and this oil must be removed or neutralized before feathers are fit for beds. This is effected by heat, or by heat and an alkali. As soon as picked they should be spread upon boards and oven-dried, or they will heat and stick together and putrify. Upholsterers prepare the feathers by rejecting from them all coarse ones — the tail and small wing feathers. They are next put into rooms heated artificially, with ventilators at the top to let off all impure vapors which arise from them. In this room they are frequently turned till quite dry. They are then put into a coarse bolting machine, and whirled round with great velocity until all dirt and dust is driven off. The whole process of curing will reduce their weight about one pound in seven.

They are sometimes prepared by sprinkling a little quick-lime over them, which combines with the oil and prevents its becoming rancid.

Another mode is to take a pound of quick lime to a gallon of water; stir it well; then let the sediment form, and turn off the clear water from the top. Immerse the feathers in this for two or three days; then spread them upon coarse nets to dry. Shake them from time to time, and when perfectly dry, put them loosely in bags and beat them thoroughly, and they will be ready for use.

If a receipt is required for a bed fit for a carrion-crow, here it is: Let your geese be as unhealthy as possible. Either pluck them four or five times a season, or, if you kill them, let them lie several hours till cold.

Then put them into hot water to make the feathers come easy. In pulling, take out large handsful at a time, so as to have scraps of meat and shreds of skin adhere to the quill; let them lie for several days in wet heaps to ferment a little. Then dry them suddenly by violent heat, cram them into the bed-tick, and jump on, and if you have not an odorous bed, and, in a month or two, a bedful of visiters seeking food, then there is no truth in the laws of nature.

IV. *The care of Beds*, is not understood, often, by even good housewives. When a bed is freshly made it often smells strong. Constant airing, will, if the feathers are good, and only new, remove the scent.

A bed in constant use should be invariably beaten and shaken up daily, to enable the feathers to retain their elasticity.

It should lie after it is shaken up, for two or three hours a day, in a well ventilated room. The human body is constantly giving off a perspiration; and at night more than usual, from the relaxed condition of the skin. The bed will become foul from this cause if not well aired. If the bed is in a room which cannot be spared for such a length of time, it should be put out to air two full days in the week.

In airing beds, *the sun should never shine directly upon them.* It is *air*, not *heat*, that they need. We have seen beds lying on a roof where the direct and reflected rays of the sun had full power, and the feathers, without doubt, were *stewing*, and the oil in the quill becoming rancid; so that the bed smells worse after its roasting than before. *Always air beds in the shade, and, if possible, in cool and windy days.*

And now, if any of our attentive housewife readers, and we have not a few, are disposed to reward us for all this advice, let them give us a bed to sleep on, when we next visit them, made of growing feathers, from live and healthy geese, carefully picked, well cured, daily shaken up and thoroughly aired; and if we do not dream that the owner is an angel, it will be because we are too much occupied in sound sleeping.

---

Look out for bugs as carefully as they do for themselves, and your garden will not suffer.

### Nail up your Bugs.

*"The words of the wise are as goads and as nails fastened by masters of assemblies."*
Solomon.

After a great pother about canker worms, peach-tree worms, and other audacious robber-worms; after smoke, salt, tar, and tansey, bands of wool, cups of oil, lime, ashes, and surgery have been set forth as remedies, to the confusion of those who have tried them bootlessly, it now appears that we are about to *nail* the rascals. The Boston Cultivator for August 2, contains an article from John R. Cross, Lincoln St., Boston, ON DESTROYING INSECTS ON TREES, from which we quote:

"I did not intend to give it publicity until I had fully tested it, but as the ravages are very extensive in the west, I cannot delay giving you the experiment, hoping that some of your western readers may now give it a fair trial and report the result. I will give one case which may induce the experiment wherever the evil is felt. In conversation with a friend in Newberryport, Dr. Watson, last fall, I mentioned the experiment; he invited me to his garden, where last year a fruit tree was infested with the nests of caterpillar or canker worms as were his neighbors' trees; he showed me a board nailed for convenience of a clothes line upon one of the large limbs of the tree; he said he noticed a little while afterward that the nests on that limb dried up, and the worms disappeared, though the cause did not then occur to him, though apparent as it will be to any scientific mind.

"Drive carefully well home, so that the bark will heal over a few headless cast iron nails, say some six or eight, size and number according to the size of the tree, in a ring around its body, a foot or two above the ground. The oxidation of the iron by the sap, will evolve ammonia which will, of course, with the rising sap impregnate every part of the foliage, and prove to the delicate palate of the patient, a nostrum, which will soon become, as in many cases of larger animals the real panacea for the ills of life, *via. Tomb.* I think if the ladies should drive some small iron brads into some limbs of any plant infested with any insect, they would find it a good and safe remedy. and I imagine in any case instead of injury the ammonia will be found particularly invigorating. Let it be tried upon a limb of any tree, where there is a vigorous nest of caterpillrs and watch it for a week or ten days, and I think the result will pay for the nails."

Let our farmers take their hammers and nails and start for the orchard; if they see a

bug on the tree, drive a nail, and he is a bug no more! If they see a worm, in with a nail, and the "ammonia evolved" will finish his functions!

The Southern planter is out with a backer to the Boston Cultivator.

"A singular fact, and one worthy of being recorded, was mentioned to us a few days since by Mr. Alexander Duke, of Albemarle. He stated, that whilst on a visit to a neighbor, his attention was called to a large peach orchard, every tree in which had been totally destroyed by the ravages of the worm, with the exception of three, and these three were probably the most thrifty and flourishing peach trees he ever saw. The only cause of their superiority known to his host, was an experiment made in consequence of observing that those parts of worm-eaten timber into which nails had been driven, were generally sound; when his trees were about a year old he had selected three of them and driven a tenpenny nail through the body, as near the ground as possible; whilst the balance of his orchard has gradually failed and finally yielded entirely to the ravages of the worms; these three trees, selected at random, treated precisely in the same manner, with the exception of the nailing, had always been vigorous and healthy, furnishing him at that very period with the greatest profusion of the most luscious fruit. It is supposed that the salts of iron afforded by the nail is offensive to the worm, whilst it is harmless, or perhaps even beneficial to the tree."

We do not wish to interrupt any experiments which the enterprising may choose to make. Tobesure we regard the facts with some incredulity, and the chemical explanations with something of the mirthful superadded to unbelief. But if nails *are* an antidote to worms—a real vermifuge—let them be administered, whatever may be the explanations; whether they are an electric battery, giving the insects a little domestic, vegetable lightning, or whether they afford "salts of iron" to physic them, or "evolve ammonia" in such potent, pungent strength that vermicular nostrils are unable to endure it!

While one is fairly engaged in a campaign of experiments, I heartily hope that war will be carried to the very territory of ignorance, and I will propound several other important questions of fact and theory, which, if settled, will crown somebody's brow with laurels.

It is said that hanging a scythe in a plum tree, or an iron hoop, or horse shoes, will insure a crop of plums. This ought to be investigated.

It is said that pear trees that are unfruitful, may be made to bear, by digging under them, cutting the tap root, and burying a black cat there. We do not know as it makes any difference as to the sex of the cat, though we should, if trying it, rather prefer the male cat.

Lastly, that we may contribute our mite to the advancement of science, we will state that, in our youth, we were informed, that, if we would go into the wood-house once a-day and rub our hands with a chip, *without thinking of red foxes' tail*, the warts would all go off. We have no doubt that it would have been successful, but every time we tried the experiment, whisk came the red foxes tail into our head and spoilt the whole affair. But might this not cure warts on trees?

## ORIGINAL CORRESPONDENCE.

For the Indiana Farmer and Gardener.

### "Slobbering in Horses."

Supposing the object of the queries on this subject (p. 212.) to be, to gather information from all available quarters, I contribute my mite to the general stock which may be collected.

In 1828 when I first owned a horse, I date my earliest attention to this subject. As a matter of curiosity and of interest too, I started enquiries in all directions; and the sum of my reading and conversations, in a short time, was as follows: 1. Clover is the only herbage which produces driveling in the horse. 2. The first and second crops of clover will thus affect the horse's mouth; but the second crop more than the first, *generally*. 3. Both the white and red clover act upon the horse in this manner. 4. That this property of clover was attributed by some to presence of a minute insect upon the plant, possessing the irritating virtues of the spanish fly; by others to some diseased condition of the clover; and by others, to less plausible causes.

Thus furnished with the views of others as time saving guides, I began my own observations; and those result in the corroboration of the first three statements; and to these I add:

Hogs, as well as horses, are made to slobber by clover; I have not noticed this effect upon other cattle.

I think the clover crops of the same season do not all possess this property, or else all horses, are not equally affected by the hay.

The driveling is a case of pure salivation, produced, not by insects or a morbid condition of the clover, but by the *natural sialagogue properties of the plant.* Medical men sometimes employ other plants to produce a copious secretion of saliva in the human mouth; and in these instances the virtues is known to reside in the vegetables themselves; the most remarkable example of this salivating property exists in the root of pellitory, a plant which belongs to the same genus as our universal dog-fennel, or may-weed; and, at a certain part of the season, I have sometimes almost blistered my tongue by tasting the flowers of this *American* pellitory.

Any one who will chew a mouthful of clover stems will, if his gustatory nerves are as sensitive as mine, perceive, in a short time, an obscure pungency in his mouth, with an unusual augmentation of moisture there. I have only experimented in this way upon *cured* clover. The pungent warmth of the mouth has sometimes continued more than an hour.

When my horses have been thus salivated, I have perfectly checked the flow from their mouth by allowing them a few handfuls of currant leaves. I was led to use these from a knowledge of their astringent properties. All horses however cannot be induced to eat them; and I think all have not proved equally susceptible to their medical virtues.

As the horse's mouth when thus affected, is evidently in a morbid condition, the salivation cannot but be considered more or less injurious. We know the horse sometimes becomes rapidly emaciated, dull, insufferably thirsty, and his mouth preternaturally hot; but I have not known any *serious* consequences to ensue. The horse, however, is not the only one concerned in this matter; his slobbering sometimes incommodes all who come within his reach almost as much as the slobbering of a certain other animal who masticates *tobacco hay.*

If the horse lost as much fluid by a diarrhœa, or *sweated* out the gallons of water which run from his mouth, we should certainly not look upon the event without concern.

Does clover raised in warm latitudes produce salivation in horses? J. T. P.

---

**Revolution in Agriculture Anticipated.**

*Liebig and his reputed discovery.*—The German papers give currency to the statement that M. Liebig, the celebrated professor of chemistry at the University of Geissen, has discovered a mineral substance which, when combined with guano, will produce one of the most fertilizing manures known. It is added, that a joint stock company, with a capital of £120,000 composed for the most part of leading English capitalists, was immediately, on the discovery being made, formed for the purpose of carrying on upon a large scale the manufacture of the new compound. Among the subscribers are, however, several eminent professors of agriculture, who, according to the *Impartial du Rhin*, give out that the application of this substance to the culture of lands, will produce an entire revolution in the agricultural system.—*American Farm.*

---

**Western Shepherd.**

Revised by the Author, for the Indiana Far. and Gard.

*Washing, shearing, preparations of the fleece and packing wool for market. Size of wool bags. General directions. Wool back-washed. Wool scoured. Wool in grease.*

The flock may be kept well, but if the wool is not attended to, and well handled, the full value can never be attained. As much care as possible should be observed that the flock does not range where the wool collects Spanish needles or burs. In the month of March or April, before the sheep go out to spring pasture, the first shearing operation begins. It is technically called *docking.* It is to shear the tail and around the tail, and a strip down each hind leg, and any coarse locks about the haunches. This is done to prevent the accumulation of dirt and filth that would otherwise adhere to the wool when the sheep go out on the fresh spring grass. Thus a quarter of a pound of wool is saved from each sheep, that would be otherwise thrown away in dag locks at the shearing, and it greatly facilitates the operation of shearing which follows in about six weeks afterwards. The usual way of preparing wool for market is to have it back-washed: that is, the sheep are washed previous to shearing. The washing of sheep is by taking them to a large pool or stream of water. The washers get into a depth of water, a little more than waist high, at just such depth as to prevent the hind legs of the sheep from touching bottom. Holding the sheep so as to prevent its head from going under the water, yet keeping its body immersed; the first man rubs it all over, back, belly, and sides, for two or three minutes, and then hands it to the next who does the like. The third, the most experienced, gives it the last wash, and sees that it is done well. Care should be taken that the sheep does not flounder in the mud when it leaves the water; it then frequently needs support for a few seconds, until the weight of water has drained from the fleece. In about six or seven days, if the weather is warm, a little of the yolk or grease will be-

gin to rise in the wool; then is the time to begin shearing. Good shearers are necessary, and good shears too. Those who have an interest in flocks should send their sons to practice where there is a good shearer, to learn the art. A good shearer will shear thirty fine-wooled sheep per day, or sixty coarse-wooled common sheep. A bad shearer will, in a very imperfect manner, get through a dozen. The common shears are too short, too thick, and too strong in the spring. The shearer must take off the fleece *whole*. Immediately the fleece is taken from the sheep it should be spread upon the winder's table, (which is generally a barn door on two barrels) and spread outside uppermost. The hand is passed over it to detect any burs, which must be taken out. If any dag-locks remain, take them off. Push up the fleece till the wool is as thick as when it grew upon the sheep's back; turn in the sides and wind it up firmly from the hinder end, either draw a band from the fleece itself, or take two or three turns from a ball of strong twine and tie it tight. When all are wound the packing should begin. A bolt of brunaps should be prepared. Three yards and a half is a proper quantity for a wool bag. One end and two sides should be sewed up strong with twine, and the open hem should be hemmed. At each of the four corners a handful of wool should be thrust and tied round tight with pack-thread. The mouth of the bag should be stitched round a hoop or bow, through a hole in the ceiling, so as just to let the lower end clear the ground. A man then gets in, another hands in the fleeces, he tramps them in firmly and evenly, so as to get the corners filled, and all parts of the bag equally distended. It is rather laborious, and a job that requires some skill to see that the bag is uniformly and well filled. The bag is then let down, the end is then brought together by skewers and sewed up with a packing needle. Such a bag will contain about one hundred and fifty pounds of washed wool. It is then ready for transportation to any part of the world. Any deviation from these rules puts it out of regular condition, and somewhat deteriorates the price. A uniform quality of wool should be packed in a bag.

Another mode is to shear in the grease, that is without washing the sheep, but buyers do not like it so well. They are afraid of imposition, and often find burs and dag-locks wound up in the greasy fleeces. It is liable to the more solid objection of paying freight for grease which is ultimately the farmer's loss. When it is shorn in the grease the same care in excluding the burs and dag-locks should be taken, and the same process of winding observed as with the washed fleeces. In the Merino and Saxony wool the exact value can be better ascertained in the grease than when back-washed. The very greasy quality of this species of wool makes back-washing an imperfect operation. The loss of weight of a fine fleece, when scoured ready for the manufacturer, is one-half. If the quantity were large enough the better way would be to shear it in the grease, cast it into four sorts by the hands of an experienced sorter, then scour it ready for the use of the manufacturer, which is done after the following manner: A large boiler filled with, one-third chamber lye and two-thirds water, brought to the boiling point, but not quite to bubble. Throw in the greasy fleece-wool when assorted, stir it gently round with a smooth stick, for about two minutes, then lift it out with a stick upon a rack so that it can drain into the boiler. When a sufficient quantity is thus accumulated, throw it into a trough grated at each end to prevent the wool from being washed away; then raise a sluice and let in a stream of clean soft water, which will so completely rinse the wool as to make it as white as snow. Then dry it in the *shade*. This is the art of washing fine wool, taking care never to rub it in any of the operations. With a flock of five thousand sheep, of uniform quality, the wool might be prepared in either of the three modes, and be equally saleable. The motley produce of the little flocks can offer no inducement for buyers to come amongst us.

The numerous diseases that visit flocks in the old country, are fortunately unknown here. Two diseases, only, have come within my knowledge during the last twenty years. These are the rot and the foot-rot. Suffering sheep to pasture on land that is overflowed with water gives the complaint called the *rot*. The symptoms are a swelling under the chin; a bag of water is there collected. We pierce it with a sharp penknife and the water runs out. The sheep falls away, its face is palid, its eyes white and bloodless, the wool easily comes off—the animal generally dies.

Shepherds cannot be too careful in preventing their sheep from straying into low places in the prairie, in early spring, in search of the first grass, always to be found growing in the water. Even a crop of green oats, early in the fall before a frost comes, has been known to rot young sheep. There is no cure for this disease. Salt, given freely, twice a week, highly beneficial and necessary to the health of sheep, should be given always in the evening and abundantly in moist weather. The *foot*-rot is induced by moisture, and sheep that are exclusively upon pasture are more subject to it than others. It begins by a little soreness between the claws. If taken at that stage it is of easy

cure. A caustic is the only remedy, buy care must be taken not to apply it too strong or in too large a quantity. The common blue-stone (lunar caustic)* will answer, but we usually make use of a diluted liquid caustic. Take an ounce phial, fill it with rather more than half but not quite two-thirds of vinegar, and fill it up with oil of vitriol; this application, kept for the purpose, may be applied to the sore between the claws with a feather. The sheep should be kept in a dry place for an hour after dressing, and not suffered to put its foot in the water, mud, or the dew. When the disease gets virulent it underruns the hoof, and as far as the disease has spread the hoof must be pared completely to the quick, and the caustic applied. If not arrested in its progress the whole flock may be infected. They will lose their hoofs and walk on their knees. In wet seasons they are very liable to it. But the certain cure is known. These are the only two diseases known among sheep in the western country. If the foot-rot should break out in a large flock, and get ahead, some person experienced in the disease should be sent for.

How different is this comparative freedom from disease, from that in the old countries, which led Virgil to exclaim in the following stanzas:

"On winter seas we fewer storms behold,
Than foul diseases that infect the fold.
Nor do those ills on single bodies prey,
But oftener bring the Nation to decay
And sweep the present stock and present hope away."

* This is a slip of the pen. Bluestone is not lunar caustic. Lunar caustic is nitrate of silver; blue stone is sulphate of copper.—*Editor.*

### Varieties of Cheese.

The principal varieties of cheese used in England are the following:

*Cheshire cheese.*— This cheese is famous all over Europe for its rich quality and fine, piquant flavor. It is made of entire new milk, the cream not being taken off. The cheeses are generally of very large size, usually about sixty pounds' weight, and some have been made of one, or even two hundred weight. Each cheese is usually made of the produce of one day's milking from herds of from 100 to 200 cows, who feed in rich pastures on some of the finest land in England. Their excellence must be attributed to the goodness of the milk, their size and age, and the skill employed in the manufacture. The color is not entirely natural; but a yellow tint is given by arnotto, marigolds, or carrots. It is said that some increase the richness and mellowness of the cheese by adding beef suet; or any other wholesome and sweet fat well clarified, which is poured into and mixed with the curd.

*Gloucester cheese* is much milder in its taste than the Cheshire. There are two kinds of Gloucester cheese, single and double. *Single Gloucester* is made of skimmed milk, or of the milk deprived of half the cream; of course it is not very rich, but is often of good flavor. *Double Gloucester* is a cheese that pleases almost every palate: it is made of the whole milk and cream, and is a fat cheese, usually the kind employed for toasting, though the single often toasts very well. These cheeses are made of various sizes, the single generally eight to the cwt., and very thin, and the double four to the cwt., and at least twice as thick. As the two kinds sometimes resemble each other considerably, some honest farmers stamp a figure of a heart upon the single Gloucester, to distinguish it from the double. The true characteristics of Gloucester cheese consist in its great richness, together with the mildness of its flavor, and that smooth, waxy texture which makes it cut, even in thin slices, and without crumbling, as Cheshire cheese is apt to do. Its oily matter is retained in toasting, by softening without being burned.

*Stilton cheese.*— This, from its peculiar richness and flavor, has been called the Parmesan of England. Its name is derived from having been first made at Stilton in Leicestershire, though it is now manufactured very generally throughout the counties of Cambridge, Huntingdon, Rutland, and Northampton. It is made by adding the cream of one day to the entire milk of the next. The cheeses are all of a small size, from six to eight pounds' weight, and are of a cylindrical form, made in a deep vat, and are not considered to be sufficiently mellow until they are two years old, nor ripe until they exhibit spots of blue in the interior, marking the commencement of decay. It is said that some keep them in warm, damp cellars to accelerate the ripening. The blue part is of a peculiar nature, different, it is said, from the common blue mould of cheese. The decay should not be advanced beyond a certain point. A variety of Stilton, but not so rich, or of so fine a flavor as the last, is made in a net, and of the form of a pine cone, the net impressing lines on its surface.

*Cottenham cheese*, made near a town of that name in Cambridgeshire, is a thicker kind of cream cheese than Stilton. Its superior delicacy and flavor are attributed to the fragrant herbage on the commons where the cows are pastured.

*Sage Cheese*, called also green cheese, is made chiefly in the vales of Gloucester and Wiltshire, by coloring some curd with bruised sage, marigold leaves, and parsley, and

mixing this with some uncolored curd; the whole is then made into a cheese, which, of course, exhibits a mottled appearance.

Among the Romans it was a practice to flavor cheese with thyme and other sweet herbs; and this custom was continued during the middle ages. We are told that the Emperor Charlemagne, arriving at a Bishop's palace on a fast day, could get nothing but bread and cheese. The prelate, observing the king picking out with his knife small specks, which he mistook for impurities in the cheese, informed his guest that they were parsley seeds. The monarch tasted them, and liked them so much that he requested the prelate to send him an annual supply of cheese prepared in this manner.

*Chedder cheese* is not exclusively made at the village of Chedder, in the Mendip Hills, Somersetshire. A great deal of the same kind is also made round Bridgewater, and in the marshes round Glastonbury. The cheese is peculiar, much resembling Parmesan; it has a very agreeable taste and flavor, and has a spongy appearance, the eyes being filled with a limpid and rich, but not rancid oil. The cheeses are generally large. But little of the prime Chedder cheese is made, that generally sold for it not being genuine, and is inferior.

*Brickbat cheese.* — There is nothing remarkable in this except its form. It is made by turning with rennet a mixture of cream and new milk. The curd is put into a wooden vessel the shape of a brick, and is then pressed and dried in the usual way. It is best made in September, and is ready in six months.

*Dunlop cheese* is famous in Scotland: it is so called from the parish of Dunlop, in Ayrshire, where it was first or best made, and where the pastures are very rich; but it is now manufactured in other parts of Ayrshire. The best is made entirely from new milk, and it has a peculiarly mild and rich taste; but there is nothing remarkable in the manner of making it.

In some parts of England they never churn the milk, but only the cream; consequently they make little butter-milk, because the servants will not eat this, though they have no objection to skimmed milk. In Scotland and Ireland, on the contrary, they churn all the milk, and have, of course, much butter-milk, which is much relished there.

In the highlands of Scotland they make a cheese for the table of a very high *gout*, an almost Tartarian preparation, by allowing the milk to become sour, and to coadgulate of itself, which gives a flavor even more pungent than that of goat's milk cheese.

What is called in London *new* cheese is made chiefly in Lincolnshire, and is either made all of cream, or like the Stilton, by adding the cream of one day's milking to the milk that comes immediately from the cow: they are extremely thin, and are compressed gently two or three times, turned for a few days, and then sent to be disposed of to be eaten new with radishes, salad, &c. It may be made in the following manner: Warm some cream, add rennet in the proportion of a spoonful to a pint, or more if necessary. Put the curd into a sieve, having a cloth at the bottom; when it has remained twenty-four hours, transfer it to a cheese vat, and cover it with a wet cloth and board; in about two hours it may be used.

*Skimmed-milk cheese.* — Cheese made from the curd of skimmed milk, when all the cream has been separated, has in it no butyraceous matter, but is the caseous substance in a pure state, resembling very nearly white of eggs or albumen, or, perhaps, more nearly the gluten of wheat. This cheese from skimmed milk only is made in those districts of England where butter is the chief object of the dairy-man, as in Essex and Suffolk. What is made in England of this kind has scarcely any flavor, and dries almost as hard as horn, but is as digestible as the softer cheese, though not very palatable. It is, however, useful as part of ship stores, being less liable to spoil on a sea voyage than richer cheese, particularly in a warm climate. On the subject of skimmed-milk cheese, Dr. Anderson celebrated for his writings on agriculture, observes that it is an erroneous idea to suppose that the agreeable taste of cheese depends solely upon the quantity of oily or fat matter it may contain. Parmesan cheese is made of skimmed milk; so are the Dutch cheeses, which many consider as very pleasant tasted. He has seen cheese made of skimmed milk that ate exactly like the finest cream cheese, and he considers that what is called richness in cheese depends as much upon the particular mode in which they are manufactured as upon the materials of which the cheese consists. In confirmation of this opinion, he remarks that though the taste of double Gloucester differs so much from Cheshire cheese, yet they are both made from the same kind of milk.

*Parmesan cheese.* — This most celebrated of all cheese is made in the duchy of Parma and Piacenza, and in various parts of Lombardy: at present the district of Lodi is in high repute for it. It was formerly supposed to be made from goat's milk; but it is made merely of skimmed cows' milk, and the high flavor which it has is supposed by some to be owing to the rich herbage of the meadows of the Po, where the cows are pastured, and by others solely to the process by which it is manufactured, a particular account of which may be seen in Cadell's "Journey in Italy, 1818." Half the milk has stood sixteen or seventeen hours, and the other half has stood only six. The milk is heated and coagulated in a caldron, and without being taken out of the caldron, the curd is broken very small by an implement consisting of a stick with crow-wires; it is again heated, or, rather, scalded, till the curd, now a deposition from the whey, has attained a considerable degree of firmness; it is then taken out, drained, salted, and pressed, and in forty days it is fit to put into the cheese loft.

The best Parmesan is kept for three or four years, and none is carried to market until it is at least six months old. Another account of the manner of making it is to be found in the seventh volume of the Bath Society's papers, and in the second volume of Mr. Arthur Young's "Travels in France."

*Dutch cheese.*—In Holland they coagulate their milk with muriatic acid instead of rennet, which occasions that pungent taste peculiar to this cheese, and preserves it from mites. The *Gonda* is most celebrated, which is made with extraordinary care. A detailed description of the mode of making it is published in the *Jour. Agri. des Pays.* It is made in the environs of Leyden, at Eidam and Friezland, where also a very large quantity is manufactured for England, of skimmed milk, chiefly for sea stores. In the Texel they make cheese from ewes' milk: a good deal of dutch cheese of a round form comes now to London; it is of a low price, and frequently of very good quality.

*Swiss cheese.*—Switzerland has been long celebrated for its cheese: several varieties of cheese are produced there, and though made of skimmed milk, or partially skimmed milk, yet are they remarkable for their fine flavor, which is partly owing to the herbage of the mountain pastures. That denominated from *Gruyère*, a bailiwick in the canton of Fribourg, is best known in England. This is flavored by the dried herb of Melilotos officinalis in powder. The cheeses weigh from forty to sixty pounds each, and require to be kept in a damp place, and washed frequently with white wine to preserve it from the depredations of insects. Until of late, the manufacture of this cheese was limited to a few wealthy persons: as it is necessary for its quality that the cheese should be very large, and that the milk should be coagulated on the day it was taken from the cow, it was only by keeping a large number of cows that the manufacture could be carried on, and the owner of a few cows only was unable to succeed. At present, however, it appears that cheese dairies have been established by the poor peasantry joining together, and thus competing with the more wealthy. Another excellent cheese is made at Neufchatel. The *Schabziegar* cheese is made by the mountaineers of the Canton of Glarus. It has a marbled appearance and aromatic flavor from the bruised leaves of the melilot. The milk is exposed to the temperature of 46° for five or six days, when the cream is completely formed, and is taken off. The skimmed milk is coagulated by sour milk, and not by rennet, and the curd thus obtained is pressed strongly in bags, and when sufficiently pressed and dried, it is ground to powder, salted, and mixed with the bruised flowers or seeds of the Melilotos officinalis, and afterward again pressed into cheese. The entire separation of the cream, or unctuous part of the milk, is essential. Some Swiss cheese is also manufactured from a mixture of ewe milk with that of the cow.

*Westphalia cheese* is a skimmed milk cheese, and as remarkable instance how much the quality of cheese depends upon the manufacture. It is described by some as being preferable to the Dutch, Swiss, and even Parmesan cheese. The cream is allowed to remain till the milk beneath is sub-acid; it is then removed, and the milk placed near a fire to coagulate. The whey is next expressed from the curd, which is dried and crumbled between the hands. It remains for several days until the putrid fermentation commences; but this is stopped by kneading it into balls with carroway, salt, butter, pounded pepper, and cloves. Sometimes these balls, or little cheeses, are hung up in the smoke of a wood fire.

*Cheese from milk and potatoes* is manufactured in Thuringia and Saxony. The best potatoes are half dressed in steam, peeled and reduced to a pulp. Five pounds of this are mixed with from one to ten pounds of sweet curd, and kneaded together, some salt being added; after lying for a few days, this is again kneaded, and then pressed into little baskets, where the superfluous moisture drains off; the cheeses are then formed into balls and dried in the shade. These cheeses keep well in the dry, and their quality improves with age, with the advantage that they generate no vermin; their taste is said to exceed the best cheese made in Holland.

*Cream cheese*, although so called, is not properly cheese, but is nothing more than cream dried sufficiently to be cut with a knife. To make it, a quantity of good sweet cream is put into a cheese vat, with green rushes sewed together on purpose, at the bottom of the vat, which must have a sufficient number of holes to let the whey which drains off pass freely away. On the top of this cheese are likewise laid rushes or long grass of the Indian corn, in the same manner as at the bottom, in order to allow it to be turned without being handled. It is usual to make these cheeses from one inch to one inch and a half in thickness. The thinner they are made, the sooner they are ready. It is kept in a warm place to sweat and ripen; but extremes of heat or cold are injurious, and some judgment must be used in managing it.—*Enc. of Domestic Economy.*

### Girls Beware.

Girls, beware of transient young men.—Never suffer the addresses of a stranger. Recollect that one good farmer's boy, or industrious mechanic, is worth more than all the floating trash in the world. The allurements of a dandy Jack, with a gold chain round his neck, a walking stick in his paw, a three penny cigar in his mouth, some honest tailor's coat on his back, and a brainless though fancy skull, never can make up the loss of a good father's home—a good mother's counsel, and the society of brothers and sisters;—their affections last—while that of such a young man is lost in the wane of a honey-moon. 'Tis true.

### Winter Grain--Steeps for Seed.

We should be in favor of sowing rye as early in September as practicable; and where there is no danger to be feared from the fly, we would observe the same rule in regard to wheat. There is a particular reason for early sowing rye this season, and that is the advantage it will afford for feed to sheep and young stock. The dry weather has lessened the hay crop to a great extent, and the supply of grass in pastures must in many cases be very small. Rye, if allowed to get good root, may be pastured with light stock in the fall, and to some extent during winter. In some cases it may even be expedient to feed in spring. The diminution which results to the yield of grain is not equivalent to the advantages as pasture. The crop starts very early, and is particularly adapted to the dry lands on which the grass has suffered most. Would it not be judicious to sow his crop largely, to be used this fall and next spring as a substitute for hay and grass! In passing through the country, we notice in the barn-yards, and around the barns, or sometimes by the road-side, considerable piles of manure, exposed to waste by evaporation and washing of rains. If some of the fields where the grass is dried up were plowed, and all the manure now lying useless, was carefully collected and applied to them, a large amount of feed might be produced, which would be available before much grass would be had next season.

In the preparation of ground for winter grain, either wheat or rye, we doubt the propriety of bringing to the surface, the sward, and vegetable matter which had been buried but a few weeks before; especially where the soil is sufficiently porous and loose. Some tool should be used which will sufficiently mellow the soil, without reversing the furrows. A cultivator, if rightly constructed, and worked at first mostly lengthwise of the furrows, is found to answer a good purpose.

The preparation of the seed is an important matter. The cleanest and heaviest should be sown. If it contain seeds of pernicious plants, they should be taken out. It will amply pay to pick over by hand a peck or half bushel of wheat, or other grain, to be sown on a spot of good clean ground, purposely for seed. Chess, oats, and other seeds, lighter than wheat kernels, may be principally taken out by putting the grain in strong brine, a small quantity at a time, and stirring it with a stick. The foul seeds will rise, and may be skimmed off. When it has been finished, it may be put on a floor and dried off, or rendered fit for sowing, by mixing with it air-slacked lime, or plaster. Passing the grain slowly through a good winnowing mill, will clean it from nearly all the small seeds, such as wild pink, wild mustard, and seeds of most weeds, as well as the most shrivelled and imperfect kernels.

The various kinds of *smut* in grain have been well ascertained to be vegetable parasites of the fungi tribe. The species known as *Uredo fœtidæ*, commonly called "dust, or pepper brand," is the most injurious to wheat. Its seeds are so minute that they are believed to be taken in by the spungioles of the plant, and are with the sap carried up the pores into the cavity of the embryo kernel, where the fungus reproduces itself; causing an abortion of the grain, and giving in its place a black dust of most pungent and disagreeable odor and taste.

There is no longer any doubt that this substance may be eradicated from wheat by means of certain substances applied to the seed. So often has this been proved by actual experiment, that we "hold him no longer guiltless," who neglects the application of the remedy. The vegetative power of the fungus may be killed by lime, ashes, brine, solutions of arsenic, vitriol, &c. We have tried nearly all these substances, and give the preference to vitriol. Our mode of using it has been as follows: Dissolve in hot water two ounces of blue vitriol, (sulphate of copper,) for each bushel of wheat; add as much water as is necessary to cover the grain, stirring the solution well. Soak the wheat two or three hours, and dry it with plaster before sowing.—*Alb. Cult.*

### Early Potatoes.

A writer in the Maine Cultivator, says that he planted the white blue nose potatoes the last of April, and he had good sized ripe potatoes, on the 14th of July. We have tried many experiments to ascertain what potatoes are the earliest, selecting seed from different sections, and we have found the above kind the earliest of all, and when used early of the finest quality, being very good and mealy before fully grown. They do not usually grow large nor yield well, but in the neighborhood of Eastport, Maine, owing to a peculiar soil, or high manuring, they attain a good size, and large quantities of them are sold in this market under the name of "Eastport potatoes."

*Smart weed*, green or dry, is an excellent medicine for horses in several diseases, particularly for a cough. Feed them as with grass or hay. Every farmer who has this weed or herb, growing on his premises, should cut, dry, and save against time of need.—*Boston Cult.*

Sow timothy seed in the fall, and clover in the spring, when land is rather dry.